

Dankwardt et al.
Application No.: 10/072,730

PATENT

Remarks

Amendments

Claims 1, 16, and 36 are amended to insert a comma between "aralkyl" and "heteroaryl", as was the drafter's original intent. Claim 1 is additionally amended to delete "prodrugs, individual isomers, and mixtures of isomers", which do not add to the scope of the claim and are thus superfluous. Claim 16 has also been amended to correct $-C(=NR^8)NSO_2-$ (which is missing a substituent on the second N) to $-C(=NR^8)NR^8SO_2-$, which is supported in the specification at page 2, line 16, *inter alia*.

Claims 13, 15, 21, 35, and 41 have been amended to delete "(S,S)-" to remove any ambiguity as to the stereochemistry of the substituent. No new matter is added thereby.

Rejection Under §112, First Paragraph

Claim 42 was rejected as not enabled under §112, first paragraph. Applicants respectfully traverse.

As set forth in the specification at page 1, line 23 through page 2, line 4, a number of fibrotic diseases are caused by excessive collagen deposition. Collagen (types I, II, and III) deposition can be reduced by inhibiting procollagen C-proteinase ("PCP"): in the absence of PCP activity, procollagen does not form insoluble fibrils, and thus cannot form the protease-resistant deposits that cause many of the symptoms of these diseases.

Although clinical efficacy has not yet been established (at least to the knowledge of the undersigned), clinical efficacy is not a prerequisite for utility under 35 USC §§101 or 112. See, e.g., MPEP §2107.1(III):

"Similarly, courts have found utility for therapeutic inventions despite the fact that an applicant is at a very early state in the development of a pharmaceutical product or therapeutic regimen based on a claimed pharmacological or bioactive compound or composition. The Federal Circuit, in *Cross v. Iizuka*, 753 F.2d 1040, 1051, 224 USPQ 739, 747-48 (Fed. Cir. 1985), commented on the significance of data from *in vitro* testing that showed pharmacological activity:

We perceive no insurmountable difficulty, under appropriate circumstances, in finding that the first link in the screening chain, *in vitro* testing, may establish a practical utility for the compound in question. Successful *in vitro* testing will marshal resources and direct the expenditure of effort to further *in vivo* testing of the

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most potent compounds, thereby providing an immediate benefit to the public, analogous to the benefit provided by the showing of an *in vivo* utility.”
(MPEP §2107.0(III), emphasis added.)

In the present case, Applicants respectfully submit that the issues the Examiner has raised concern issues that are addressed through the FDA regulatory approval process, and submit that the data presented in the specification suffices to establish patentable utility.

Rejection Under §112, Second Paragraph

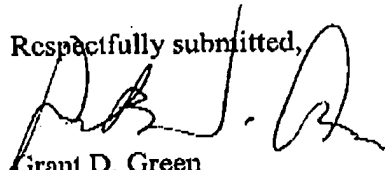
Claims 1-29, 31, and 34-42 were rejected as indefinite under §112, second paragraph. Applicants respectfully submit that these rejections are overcome by the amendment of the claims above.

With regard to claim 1 (and claims 16 and 36), a comma was in fact intended between “aralkyl” and “heteroaryl”. This is clear from claim 18, in which X is benzyl: benzyl is an aralkyl, but not a “aralkyl-heteroaryl”.

With regard to the (S,S) stereochemistry designation, Applicants have elected to slightly broaden the scope of those claims by eliminating the “(S,S)” limitation, thus rendering the rejection moot.

Applicants appreciate that the claims are apparently free of the prior art, and submit that the application is now in condition for allowance. Such action is respectfully solicited. If there is any question or disagreement that can be resolved by telephone, the Examiner is invited to telephone the undersigned at the number below.

Respectfully submitted,


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